

## Claims

### What is claimed is:

- Sub. A3
- 1 1. A multi-composition stick product, comprising:
    - 2 (a) a container having walls, an exterior contour, and an interior contour; and
    - 3 (b) a molded stick composition disposed so as to contact the walls of the
    - 4 container and be advanceable in the container, the stick composition comprising:
      - 5 (i) a first composition; and
      - 6 (ii) a second composition;
    - 7 wherein the first and second compositions differ by at least one component and the
    - 8 compositions are arranged in a predetermined non-random pattern that is reproducible.
  - 1 2. The multi-composition stick product in accordance with claim 1, wherein the interior
  - 2 and exterior contours of the container are different.
  - 1 3. The multi-composition stick product in accordance with claim 1, wherein the
  - 2 component is a medicament, colorant, fragrance, flavorant, sunscreen, preservative,
  - 3 conditioner, moisturizer, emollient, or surfactant.
  - 1 4. The multi-composition stick product in accordance with claim 3, wherein the
  - 2 component is a colorant.
  - 1 5. The multi-composition stick product in accordance with claim 4, wherein the
  - 2 compositions form a predetermined discrete multicolor image.

- Sub. A4
- 1 6. The multi-composition stick product in accordance with claim 5, wherein the image
  - 2 is a heart; evergreen tree; ying-yang; 5-pointed star; 6-pointed star; sun; circle; half and half
  - 3 circle; heart with an arrow; lateral stripes; diagonal stripes (barber pole); longitudinal stripes;
  - 4 happy face; sad face; tree; crescent moon; cross; 4-pointed star; flower; ellipse; wave;

5 lightening bolt; pinwheel; flag; lips; one or more alphanumeric letters; any other geometric  
6 shape; or any combination thereof.

1 7. The multi-composition stick product in accordance with claim 5, wherein the stick  
2 composition has a longitudinal axis and for at least a portion thereof, each cross-section  
3 perpendicular to the longitudinal axis of the composition contains the same multicolor image.

1 8. The multi-composition stick product in accordance with claim 1, wherein the stick  
2 composition is for topical application to an animal in need thereof.

1 ~~9. The multi-composition stick product in accordance with claim 8, wherein the stick~~  
2 ~~composition is lip balm, lipstick, lip gloss, sunscreen stick, or deodorant.~~

1 ~~10. The multi-composition stick product in accordance with claim 8, wherein the stick~~  
2 ~~composition comprises a pharmaceutically acceptable vehicle.~~

1 ~~11. The multi-composition stick product in accordance with claim 9, wherein the stick~~  
2 ~~composition further comprises a medicament, a sunscreen, a preservative, a flavorant, a~~  
3 ~~fragrance, a colorant, a conditioner, a moisturizer, an emollient, a cleansing agent, an~~  
4 ~~antioxidant, an antistatic agent, a stabilizer, a pH adjuster, a surfactant, or any combination~~  
5 ~~thereof.~~

Sub. A5  
1 12. A multi-color stick product, comprising:  
2 (a) a container having walls; and  
3 (b) a molded multi-color stick composition disposed so as to contact the walls  
4 of the container and be advanceable in the container, the stick composition comprising:  
5 (i) a first composition; and  
6 (ii) a second composition;  
7 wherein the first and second compositions differ in color and are arranged in a predetermined  
8 non-random image that is reproducible.

1           13. The multi-color stick product in accordance with claim 12, wherein the stick  
2 product is a lip balm.

1           14. A method for manufacturing a multi-composition stick product advanceable from  
2 an open end of a container, the method comprising the steps of:

3                     inserting a mold shaft into the container;  
4                     dispensing a first composition of stick composition into the container around the  
5 mold shaft;

6                     removing the mold shaft from the container to form a cavity; and

7                     filling at least a portion of the cavity with a second composition of stick  
8 composition, the first and second compositions differing by at least one component and being  
9 arranged in a predetermined non-random pattern that is reproducible.

1           15. The method in accordance with claim 14, wherein the inserting step comprises  
2 inserting a portion of a first filling nozzle into the container, the first filling nozzle including  
3 a first mold shaft having a first predetermined shape and a first outer barrier disposed about at  
4 least a portion of the first mold shaft.

5           16. The method in accordance with claim 15, wherein the dispensing step comprises  
6 dispensing the first composition of stick composition into a passageway, defined between the  
7 outer surface of the first filling nozzle and the inner surface of the first outer barrier, and into  
8 the container around the mold shaft.

1           17. The method in accordance with claim 16, wherein the first mold shaft is hollow.

1           18. The method in accordance with claim 17, wherein the filling step comprises  
2 dispensing the second composition of stick composition through the first mold shaft and into  
3 the container so as to fill at least a portion of the cavity.

1 19. The method in accordance with claim 16, wherein the first mold shaft is solid or  
2 semi-hollow.

1 20. The method in accordance with claim 19, wherein the filling step comprises  
2 dispensing, using a second filling nozzle having a second hollow mold shaft of a second  
3 predetermined shape, the second composition of stick composition into the second mold shaft  
4 so as to fill at least a portion of the cavity.

1 21. The method in accordance with claim 14, wherein the dispensing step comprises  
2 dispensing the first composition of stick composition into the container around the mold shaft.

1 22. The method in accordance with claim 14, further comprising the step of finishing  
2 the top surface of the stick composition while disposed in the container.

1 23. The method in accordance with claim 22, wherein said finishing step comprises  
2 scraping the top surface of the stick composition with a heated scraper.

1 24. The method in accordance with claim 22, wherein said finishing step comprises  
2 glazing the top surface of the stick composition.

1 25. The method in accordance with claim 14, wherein the component is a medicament,  
2 colorant, fragrance, flavorant, sunscreen, preservative, conditioner, moisturizer, emollient, or  
3 surfactant.

1 26. The method in accordance with claim 25, wherein the component is a colorant.

1 27. The method in accordance with claim 26, wherein the first and second compositions  
2 are arranged as a discrete predetermined non-random multi-color image that is reproducible.

1        28. The method in accordance with claim 27, wherein for at least a portion of the  
2 composition stick, each cross-section in a direction perpendicular to the longitudinal direction  
3 of the composition stick has the same image.

4        29. The method in accordance with claim 14, wherein substantially no mixing occurs  
5 at the interface between the first and second compositions.

1        30. The method in accordance with claim 14, wherein the stick product is a lip balm.

1        31. The method in accordance with claim 14, wherein the dispensing step comprises  
2 dispensing the first composition of stick composition onto a support tray by which the container  
3 is held so that the first composition spills into the container around the mold shaft.

1        32. The method in accordance with claim 31, wherein the filling step comprises  
2 dispensing the second composition of stick composition onto the support tray so that the second  
3 composition spills into the container and fills at least a portion of the cavity.

1        33. The method in accordance with claim 32, wherein the removing step further  
2 comprises finishing the top surface of the first composition.

1        34. The method in accordance with claim 14, further comprising the step of removing  
2 excess first and second compositions from the support tray.

1        35. A method for manufacturing a multi-composition stick product advanceable from  
2 an open end of a container, the method comprising the steps of:

3                dispensing a first composition of stick composition into the container;

4                inserting a mold shaft into the container so as to displace the first composition  
5 therein;

6                removing the mold shaft from the container to form a cavity; and

7 filling at least a portion of the cavity with a second composition of stick  
8 composition, the first and second compositions differing by at least one component and being  
9 arranged in a predetermined non-random pattern that is reproducible.

1 36. A system for manufacturing a multi-composition stick product in a container having  
2 an inner contour and an outer contour, the stick product including a stick composition  
3 comprising a first composition and a second composition, the first and second compositions  
4 differing by at least one component and being arranged in a predetermined non-random pattern  
5 that is reproducible, comprising:

6 a filling nozzle comprising:

7 a mold shaft insertable into the container;

8 an outer barrier disposed about at least a portion of the mold shaft so as  
9 to form a passageway between the outer barrier and the mold shaft for receiving the first  
10 composition.

1 37. The system in accordance with claim 36, wherein the mold shaft is solid or semi-  
2 hollow.

1 38. The system in accordance with claim 36, wherein the mold shaft is hollow.

1 39. The system in accordance with claim 36, wherein the inner and outer contours of  
2 the container differ in shape.

1 40. The system in accordance with claim 36, wherein the outer barrier is a ring  
2 disposed about the mold shaft.

1 41. The system in accordance with claim 36, wherein the mold shaft and the inner  
2 contour of the container differ in shape.

1 42. The system in accordance with claim 36, wherein the mold shaft and the outer  
2 barrier are of equal length in a longitudinal direction.

1 43. The system in accordance with claim 36, wherein the mold shaft extends beyond  
2 the outer barrier in a longitudinal direction.

1 44. A system for simultaneously manufacturing a plurality of multi-composition stick  
2 products in a plurality of containers, each stick product including a stick composition  
3 comprising a first composition and a second composition, the first and second compositions  
4 differing by at least one component and being arranged in a predetermined non-random pattern  
5 that is reproducible, comprising:

6 a support tray having a plurality of holes defined therein for receiving the plural  
7 containers;

8 a holding member; and

9 a plurality of interchangeable filling nozzles, each filling nozzle being secured  
10 to the holding member by an associated releaseable locking member, and each filling nozzle  
11 comprising:

12 a mold shaft insertable into an associated container;

13 an outer barrier disposed about at least a portion of the mold shaft so as  
14 to so as to form a passageway between the mold shaft and outer barrier for receiving the first  
15 composition.

1 45. The system in accordance with claim 44, wherein the releaseable locking member  
2 is a pin, clip or clamp.

1 46. A multi-composition stick product prepared by the method of claim 14.

1 47. A system for manufacturing a multi-composition stick product in a container having  
2 an inner contour and an outer contour, the stick product including a stick composition  
3 comprising a first composition and a second composition, the first and second compositions

4 being dispensed simultaneously, differing by at least one component and being arranged in a  
5 predetermined non-random pattern that is reproducible, comprising:  
6 a first filling nozzle for dispensing the first composition;  
7 a second filling nozzle for dispensing the second composition; and  
8 a securing mechanism for connecting the first and second filling nozzles, the  
9 assembled first and second filling nozzles being insertable into the container.

1 48. A method for manufacturing a multi-composition stick product using the system  
2 in claim 47, wherein said filling nozzles and said container are rotated independently of one  
3 another.

1 49. A system for manufacturing a multi-composition stick product advanceable from  
2 a container, comprising:  
3 a cork screw shaped mold shaft adapted so as to be received in said container.

1 50. A method for manufacturing a multi-composition stick product advanceable from  
2 a container having an inner contour, comprising the steps of:  
3 inserting a cork screw shaped mold shaft into the container, said mold shaft  
4 including a plurality of spiral revolutions;  
5 dispensing a first composition of stick composition into the container between  
6 the spiral revolutions of the mold shaft;  
7 rotating while removing the mold shaft from the container to form a spiral cavity  
8 about a perimeter of the inner contour of the container; and  
9 filling at least a portion of the spiral cavity with a second composition of stick  
10 composition, the first and second compositions differing by at least one component and being  
11 arranged in a predetermined non-random pattern that is reproducible.

add C14  
add D3